

protocol IP data contained within the fast packet.

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51. (Amended) A method comprising the steps of:

receiving a plurality of frame relay frames at an asynchronous transfer mode switch in

a mesh network; and

transmitting at least a portion of the frames over one of a plurality of virtual networks

responsive to Internet protocol IP information contained in at least one of the frame relay frames.

REMARKS

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-0733.

The Office Action objected to claims 3, 10, 25, 27, 34-35, 41-45, and 51 because of various informalities. Applicants have amended these claims at the Examiner's request to correct the informalities.

The Office Action rejected claim 21 under 35 U.S.C. § 112, second paragraph as being indefinite. Applicants have amended claim 21, providing proper antecedent basis back to claim 21's new base claim 2, thus correcting any deficiency previously present in the claim.

The Office Action rejected claims 1, 10, and 22 under the judicially created doctrine obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,081,524. Applicants hereby state that Applicants are also the owner of U.S. Patent 6,081,524, the

assignment for which may be found at reel 9216, frame 0029, and Applicants herewith submit a terminal disclaimer, thus traversing the double patenting rejection.

The Office Action rejected all pending claims 1-10 and 21-51 under 35 U.S.C. § 103 as being unpatentable over Schibler et al. (U.S. Pat. No. 5,453,979, hereinafter "Schibler") in view of Focsaneanu et al. (U.S. Pat. No. 5,828,666, hereinafter "Focsaneanu"). Applicants have incorporated all the limitations of claim 1 in claim 2, and Applicants have canceled claim 1. Applicants have incorporated the limitations of claim 23 into claim 22, and Applicants have canceled claim 23. Applicants have incorporated the limitations of claim 28 into independent claim 27, and Applicants have canceled claim 28. Applicants have incorporated the limitations of claim 33 into independent claim 32, and Applicants have canceled claim 33. Applicants have incorporated the limitations of claim 39 into independent claim 38, and Applicants have canceled claim 39.

Applicants respectfully submit that the combined prior art does not teach or suggest every limitation of the claims, and that the Examiner has not produced a prima facie case of obviousness. With respect to claim 2, and the claims dependent therefrom, Applicants submit that the prior art at least does not teach or suggest user data comprising service category data.

With respect to claim 22, and the claims dependent therefrom, Applicants submit that the prior art at least does not teach or suggest routing of packets responsive to one of a plurality of service categories.

With respect to claim 24 and the claims dependent therefrom, Applicants submit that the prior art at least does not teach or suggest using separate routing tables within an asynchronous transfer

mode switch for a plurality of service categories.

With respect to claim 26, Applicants submit that the prior art at least does not teach or suggest partitioning routing tables within a fast packet switch by customer.

With respect to claim 27 and the claims dependent therefrom, Applicants submit that the prior art at least does not teach or suggest comparing an address of a fast packet with a layer 3 Internet protocol address contained within the fast packet, and determining whether they are consistent.

With respect to claim 31, Applicants submit that the prior art at least does not teach or suggest an asynchronous transfer mode address representing at least one of a plurality of virtual private networks and depending on a predetermined service category associated with a particular data link connection identifier.

With respect to claim 32 and the claims dependent therefrom, Applicants submit that the prior art at least does not teach or suggest translation circuitry being responsive to a plurality of different service categories.

With respect to claim 38 and the claims dependent therefrom, Applicants submit that the prior art at least does not teach or suggest translation circuitry including a separate routing table for each of a plurality of different service categories.

With respect to claim 43, Applicants submit that the prior art at least does not teach or suggest translation circuitry for translating a plurality of frame relay packets into asynchronous transfer mode cells having an address responsive to layer 3 Internet protocol IP data contained within a user data field of the frame relay packets.

With respect to claim 44, Applicants submit that the prior art at least does not teach or suggest translation circuitry for translating a plurality of frame relay packets into asynchronous transfer mode cells having an address responsive to layer 4 Internet protocol IP data contained within a user data field of the frame relay packets.

With respect to claim 45, Applicants submit that the prior art at least does not teach or suggest error checking circuitry for determining routing errors by comparing an address of a fast packet with layer 3 Internet protocol IP data contained within the fast packet.

With respect to claim 46 and the claims dependent therefrom, Applicants submit that the prior art at least does not teach or suggest separate routing tables for each of a plurality of service categories.

With respect to claim 49, Applicants submit that the prior art at least does not teach or suggest means for associating a data link connection identifier with a virtual network path according to the service category with which the data link connection identifier is associated.

With respect to claim 50, Applicants submit that the prior art at least does not teach or suggest virtual networks representing different service classes, each of said service classes being associated with a data link connection identifier.

With respect to claim 51, Applicants submit that the prior art at least does not teach or suggest transmitting at least a portion of the frames over one of a plurality of virtual networks responsive to internet protocol information contained in at least one of the frame relay frames.

In addition to not teaching or suggesting the above elements, the prior art lacks any suggestion

that the references should be *modified* in a manner so as to meet the above limitations. Respectfully, the Office Action does not provide a basis for which the cited references can be *combined and modified* so as to produce the limitations of the above claims.

The MPEP clearly states, in section 2143.03, that in order to establish a prima facie case of obviousness, “all claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).” The MPEP also states in the same section that if any independent claim is non-obvious under 35 U.S.C. § 103, then any claims depending therefrom is non-obvious as well. Because the prior art does not teach or suggest every limitation of the rejected claims as detailed above, Applicants respectfully submit that the Examiner has not produced a prima facie case of obviousness, and Applicants respectfully traverse this rejection.

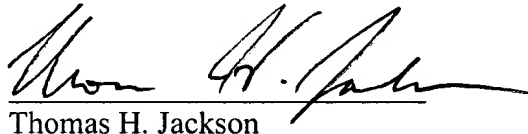
Based on the aforementioned claims 1-10 and 21-51 are in condition for allowance. Therefore, it is respectfully requested that the subject application be reconsidered and passed to issue at the Examiner’s earliest possible convenience.

AMENDMENT UNDER 37 CFR § 1.111
U.S. APPLN. NO. 09/551,399

PATENT APPLICATION

The undersigned attorney for Applicants hereby requests an Examiner interview to discuss the Schibler and Focsaneanu references and their applicability, for example, to amended claim 2, and will attempt to contact the Examiner on or about January 24, 2001 in order to schedule the interview.

Respectfully submitted,



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Appendix

A marked-up copy of amended claims is herein provided:

2. (Amended) [The method of claim 1,] A method comprising the steps of:
receiving into a fast packet network frame relay data packets, said frame relay data packets
having user data in a user data field; and
switching said frame relay packets within the fast packet network responsive to the user data;
wherein said user data comprises service category data, said method further including the step of
discriminating between a plurality of service categories based on the user data.
3. (Amended) The method of claim 2 further including the step of routing over the
[internet] Internet responsive to at least one of the service categories.
10. (Amended) The method of [claim 1] claim 2 wherein the user data includes an
[internet] Internet protocol IP packet.
21. (Amended) The method of [claim 1] claim 2 wherein the fast packet network is an
asynchronous transfer mode network and the [fast] packets are asynchronous transfer mode cells.
22. (Amended) A method comprising the steps of:

receiving a plurality of frame relay packets over a permanent virtual circuit at a first
node in an asynchronous transfer mode network;

generating an asynchronous transfer mode address based on a data field other than a
data link connection identifier within the frame relay packets; and

routing the packets through the asynchronous transfer mode network based on the

asynchronous transfer mode [address.] address;

wherein the step of routing includes routing the packets responsive to one of a plurality of service categories.

25. (Amended) The method of claim 24 wherein the service categories are determined using [internet] Internet protocol IP data within a data field of a packet passed by the asynchronous transfer mode switch.

27. (Amended) In a fast packet network, a method comprising the steps of:
receiving a fast packet;
comparing an address of the fast packet with a layer 3 [internet] Internet protocol IP address contained within the fast packet; and

determining whether the address is consistent with the layer 3 internet protocol [address.] address;

wherein the step of determining including examination of a sending address or a destination address.

32. (Amended) A network comprising:
customer premises equipment;
a fast packet switch coupled to the customer premises equipment with at least one permanent virtual circuit and receiving a plurality of frame relay data packets, the fast packet switch including address translation circuitry for translating user data within at least one of the frame relay data packets into a fast packet [address.] address;

wherein the translation circuitry is responsive to a plurality of different service categories.

34. (Amended) The network of [claim 33] claim 32 wherein the translation circuitry is responsive to [internet] Internet protocol IP data within the frame relay data packets.

35. (Amended) The network of claim 34 wherein the translation circuitry is responsive to layer 3 [internet] Internet protocol IP data.

36. (Amended) The network of [claim 33] claim 32 wherein the translation circuitry is configured to determine a quality of service responsive to layer 4 data.

38. (Amended) An asynchronous transfer mode switch comprising translation circuitry for translating a plurality of frame relay packets into asynchronous transfer mode cells, the asynchronous transfer mode switch assigning an address based on information contained within a user data field of the frame relay [packets.] packets;

wherein the translation circuitry includes a separate routing table for each of a plurality of different service categories.

41. (Amended) The asynchronous transfer mode switch of [claim 39] claim 38 wherein the translation circuitry determines the different service categories using layer 3 [internet] Internet protocol IP data.

42. (Amended) The asynchronous transfer mode switch of [claim 39] claim 38 wherein the translation circuitry determines the different service categories using layer 4 [internet] Internet protocol IP data.

43. (Amended) An asynchronous transfer mode switch comprising translation circuitry

for translating a plurality of frame relay packets into asynchronous transfer mode cells having an address responsive to layer 3 [internet] Internet protocol IP data contained within a user data field of the frame relay packets.

44. (Amended) An asynchronous transfer mode switch comprising translation circuitry for translating a plurality of frame relay packets into asynchronous transfer mode cells having an address responsive to layer 4 [internet] Internet protocol IP data contained within a user data field of the frame relay packets.

45. (Amended) A fast packet network having a node, said node including error checking circuitry for determining routing errors by comparing an address of a fast packet with layer 3 [internet] Internet protocol IP data contained within the fast packet.

51. (Amended) A method comprising the steps of:

receiving a plurality of frame relay frames at an asynchronous transfer mode switch in a mesh network; and

transmitting at least a portion of the frames over one of a plurality of virtual networks responsive to [internet] Internet protocol IP information contained in at least one of the frame relay frames.